

What is claimed is:

1. An antimicrobial composition comprising an effective amount of a chloronitrile compound, a germicide, urea and water.
2. The composition of claim 1, wherein the germicide is selected from the group consisting of diquat bromide, trichloromelamine, cetylpyridinium chloride, chloramines-T and trichloromelamine.
3. The composition of claim 1, wherein the chloronitrile compound is chlorothalonil.
4. The composition of claim 1, wherein the germicide is a bactericide.
5. The composition of claim 1, wherein the germicide is a herbicide.
6. The composition of claim 1, wherein the germicide is antimicrobial.
7. An antimicrobial composition consisting essentially of chlorothalonil, urea and water.
8. An antimicrobial composition consisting essentially of chloramine, urea and water.
9. An antimicrobial composition consisting essentially of trichloromelamine, urea and water.
10. An antimicrobial composition consisting essentially of chlorendic anhydride, chlorothalonil, urea and water.
11. A composition for preventing or retarding microbial growth in a plant, the composition produced by a process comprising:
  - providing a mixture of a chloronitrile compound and a germicide;
  - providing a solution of urea in water; and
  - dissolving the mixture in the solution to form the antimicrobial composition.

12. The antimicrobial composition of claim 11, wherein the chloronitrile compound is chlorothalonil.
13. The antimicrobial composition of claim 11, wherein the first mixture includes about 40-90 wt.% chlorothalonil and 60-10 wt.% diquat.
14. The antimicrobial composition of claim 11, wherein the mixture includes about 70 wt.% chlorothalonil and 30 wt.% diquat.
15. The antimicrobial composition of claim 11, wherein the solution further comprises about 10-40 wt.% urea and 90-60 wt.% water.
16. The antimicrobial composition of claim 11, wherein the solution further comprises about 20 wt.% urea and 80 wt.% water.
17. The antimicrobial composition of claim 11, wherein the antimicrobial composition comprises about 0.02-1.0 ounces of the mixture and about one gallon of the solution.
18. The antimicrobial composition of claim 11, wherein the antimicrobial composition comprises about 0.05 ounces of the mixture and about one gallon of the mixture.
19. The antimicrobial composition of claim 11, wherein the germicide is a bactericide.
20. The antimicrobial composition of claim 11, wherein the germicide is selected from the group consisting of diquat bromide, trichloromelamine, cetylpyridinium chloride, chloramines-T and trichloromelamine.
21. An antimicrobial composition for preventing or retarding microbial growth in a plant, the composition produced by a process comprising:
  - providing a first mixture of chlorothalonil and a bactericide;
  - providing a second mixture of urea dissolved in water; and

substantially dissolving the first mixture in the second mixture to form the antimicrobial composition.

22. The antimicrobial composition of claim 21, wherein the bactericide is trichloromelamine.
23. The antimicrobial composition of claim 21, wherein the step of providing the first mixture further comprises admixing about 80-98 wt.% of the chlorothalonil with 20-2 wt.% of the bactericide.
24. The antimicrobial composition of claim 21, wherein the step of providing the first mixture further comprises admixing the chlorothalonil and the bactericide in a weight ratio of 95:5.
25. The antimicrobial composition of claim 21, wherein the step of providing the first mixture further comprises dissolving 10-40 wt% of the urea in 90-60 wt% of water.
26. The antimicrobial composition of claim 21, wherein the step of providing the second mixture comprises dissolving urea in water in a weight ration of 20:80.
27. The antimicrobial composition of claim 21, wherein the step of combining the first mixture with the second mixture further comprises dissolving about 0.02-2.0 ounces of the first mixture in about one gallon of the second mixture.
28. The antimicrobial composition of claim 21, wherein the step of combining the first mixture with the second mixture further comprises dissolving about 0.05 ounces of the first mixture in about one gallon of the second mixture.
29. An antimicrobial composition for treating Witches' Broom disorder in plants, the composition prepared by a process comprising:

providing a mixture of cetylpyridinium chloride and chlorothalonil;

forming the antimicrobial composition by dissolving the mixture in urea and water.

30. The antimicrobial composition of claim 29, wherein the mixture includes about 5-30 wt% of cetylpyridinium chloride and a balance of chlorothalonil.

31. The antimicrobial composition of claim 29, wherein the weight ratio of cetylpyridinium to chlorothalonil in the mixture is about 10:90.

32. The antimicrobial composition of claim 29, wherein the weight ratio of mixture:urea:water is in the range of 0.05-2:19.95-18:80.

33. The antimicrobial composition of claim 29, wherein the ratio of the mixture:urea:water is about 1:19:80.

34. An antimicrobial composition for preventing or inhibiting witches' broom disorder in plants, the composition produced by a process comprising:

forming a first mixture by admixing a chlorendic anhydride with chlorothalonil in the weight a ratio of about 0.05-5 : 99.95-95; and

dissolving the first mixture and urea in water in a weight ratio of about 0.5-2 : 19.95-18 : 80 to form the antimicrobial composition.

35. The antimicrobial composition of claim 34, wherein the weight ratio of chlorendic anhydride to chlorothalonil is about 1:99.

36. The antimicrobial composition of claim 34, wherein the ratio of the first mixture:urea:water is about 1:19:80.

37. An antimicrobial composition prepared by a process comprising:

providing a first mixture of chloramines-T and chlorothalonil in a weight ratio of about 1-10:99-90; and

dissolving the first mixture and a quantity of urea in water in a weight ratio of about 0.05-2:19.95-18:80 to form an antimicrobial composition.

38. The antimicrobial composition of claim 37, wherein the first mixture includes chloramines-T and chlorothalonil in the weight ratio of about 5:95.
39. The antimicrobial composition of claim 37, wherein the ratio of the first mixture:urea:water is about 1:19:80.
40. An antimicrobial composition prepared by a process comprising dissolving about 0.05-5 wt.% of chlorothalonil and about 12-20 wt% urea in about 80 wt% water to obtain the antimicrobial composition.
41. The antimicrobial composition of claim 40, wherein the weight ratio of chlorothalonil:urea:water is about 1:19:80.
42. An antimicrobial composition prepared by a process comprising dissolving about 0.05-5 wt.% of chloramine-T and about 12-29 wt% urea in about 80 wt% water to obtain the antimicrobial composition.
43. The antimicrobial composition of claim 42, wherein the weight ratio of chloramine-T :urea:water is about 1:19:80.
44. An antimicrobial composition prepared by a process comprising dissolving about 0.05-2 wt.% of trichloromelamine and about 19.95-18 wt% urea in about 80 wt% water to obtain the antimicrobial composition.
45. The antimicrobial composition of claim 44, wherein the weight ratio of trichloromelamine :urea:water is about 1:19:80.